

CACHE COUNTY HAZARD MITIGATION STRATEGIES

Hazard Mitigation Goals

The following goals were identified to direct the county's hazard mitigation strategies. These general goals were identified and developed based on the local official surveys (See appendix A), input from the Bear River District PDM Technical Planning Team and Steering Committee.

Goal # 1: Minimize potential impacts for future development

- **Develop, refine and improve the hazard data available to local level decision makers.**
- **As appropriate, develop and implement regulatory mechanisms to insure new development activities will not increase the risk to life or property.**
- **Build technical capacity for local elected and appointed officials.**
- **Empower citizens to make informed choices.**

Goal # 2: Minimize potential impacts for existing development

- **Improve emergency disaster response capabilities.**
- **Improve the disaster resistance of existing infrastructure and critical facilities.**
- **Educate and build capacity of citizens to undertake mitigation activities.**

To accomplish these goals specific mitigation strategies were developed by participating jurisdictions. These goals were given assigned a priority of high, medium, or low by Bear River District PDM Technical Planning Team and Steering Committee. Priorities were given taking into account the following factors:

- Number of people protected by the project
- Technical feasibility
- Political support
- Environmental impacts
- Available funding source

A guiding factor in prioritizing mitigation was the thought that mitigation should provide the greatest amount of good to the greatest amount of people when cost was taken into account. Prioritizing mitigation was difficult in this plan as each as Bear River is vulnerable to many different hazards. Each with its own characteristics. Thus, recurrence intervals, past events, damage estimates compiled during the assessing vulnerability section of this plan were also taken into account.

CACHE COUNTY NATURAL HAZARD MITIGATION PROJECTS Bear River District Pre-Disaster Mitigation Plan 2004									
Hazard	Goal	Jurisdiction(s)	Objective	Project Description	Priority	Time-frame	Potential Funding	Estimated Cost	Resources
Multi-Hazard	Goal 2	All Jurisdiction	Prepare for Severe Weather Events	Become a National Weather Service “Storm Ready” Community (http://www.stormready.noaa.gov/)	Medium	2006		Minimal	NOAA
Multi-Hazard	Goal 1 & 2	All Jurisdictions	Make critical infrastructure disaster resistant.	Provide for a redundant source of electrical power in Cache Valley.	High	2007	Pacificorp, Local, Logan City, Hyrum City	YTD	Cache Chamber of Commerce, UDESHS
Multi-Hazard	Goal 1 & 2	Logan City	Protect water supply	Improve the protection of access to the Logan Canyon air vac/air release structures.	High	2004	Logan City	\$39,000	
Multi-Hazard	Goal 1 & 2	Logan City	Improve ability to manage infrastructure in an emergency	Provide key staff with portable computers to be able to access the existing infrastructure GIS database in the field in the event of an emergency.	High	2004	Local, FEMA	\$60,000	
Multi-Hazard	Goal 1 & 2	Logan City	Improve emergency management capability	Add a secondary call person.	Medium	2005	Local	\$10,000 per year	
Flooding	Goal 1 & 2	Unincorporated County, Nibley City	Reduce the threat of flooding from the Blacksmith Fork River	Dredge and widen the river channel, and build up river bank at 5200 South on the parallel to Hollow Road.	High	2006	Local, FEMA	\$4,500	
Flooding	Goal 1 & 2	Amalga, Nibley, Paradise, Trenton	Mitigate impacts related to flooding.	Initiate participation in the National Flood Insurance Program (NFIP) to enable home owners to purchase flood insurance.	High	2005		Minimal	UDESHS, ACOE
Flooding	Goal 1 & 2	Jurisdictions with identified flood hazards	Make better informed decisions.	Develop a floodplain map for communities that do not have one. Refine, update and improve existing flood plain mapping.	Medium	2009	FEMA, UDESHS, Local	\$2,500 to \$65,000 each	Consultants, FEMA, UDESHS, Public Works
Flooding	Goal 1 & 2	All Jurisdictions with Canals	Minimize flood risk from canal failure or overtopping	For those that have not already been studied, analyze and model the canals to determine deficiencies related to present and future demands (taking into account projected storm water increases based on projected development).	Medium	2007	Local, FEMA	\$95,000	Consultants
Flooding	Goal 1 & 2	All Jurisdictions	Minimize flood risk from storm water runoff.	Work toward requiring all new development to accommodate its own storm water discharge on-site. Develop ordinances and standards that require new development be designed to do on-site storm water retention.	Medium	2005	Local Funds, EPA, FEMA	\$7,000 per jurisdiction	BRAG, EPA, Utah Association of Conservation Districts, FEMA, UDESHS
Flooding	Goal 2	Logan City	Improve Logan City’s flood management capability.	Dredge 1 st , 2 nd & 3 rd Dams. Mud and silt has built up over the years causing the settlement area to shrink.	Medium	2005	Local Funds, FEMA	Approx \$120,000 per dam	
Flooding	Goal 2	Logan City	Reduce canal failure flood loss	Inventory and assess flooding vulnerability problems areas related to existing canals as well as diversion structures and transportation infrastructure. Inventory main flow areas.	High	2005	Local	Unknown	
Flooding	Goal 1	Logan City	Reduce the disrupted service due to flooding on 10 th North	Replace existing line with 16” ductile pipe from Main Street to 1600 East.	Medium	2004	Local	\$1,385,500	
Flooding	Goal 1 & 2	Smithfield City	Reduce flooding risk	Replace culvert with bridge at 700 Canyon road	Medium	2009	Local, FEMA	\$50,000	
Flooding	Goal 1 & 2	Smithfield City	Reduce flooding risk	Improve the Logan & Northern Canal	Medium	2009	Local, FEMA	\$50,000	
Wildfire	Goal 2	Paradise, Hyrum, Wellsville, Millville, Providence, Logan, North Logan, Hyde Park, Smithfield, Mendon and Richmond	Become “Firewise” communities.	Enact ordinance and planning procedures to insure development in fire prone areas are done wisely. Provisions for multiple access routes, firebreaks, wide roads and adequate water sources should be included. Standards for homes should be enforced that require defensible space and fire wise building materials and designs (see www.firewise.org).	High	2007		Minimal	BRAG, Utah Division of State Lands, Fire and Forestry, Utah League of Cities and Towns.

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Wildfire	Goal 1 & 2	Logan City	Reduce Wildfire Threat	Increase wild land firefighting compatibilities with new equipment and training. Execute a countywide training exercise. Provide Wild land Urban Interface basic red card and annual refresher training for Logan Fire Personnel.	High	2004	Local	\$28,000	
Wildfire	Goal 1 & 2	Logan City	Reduce Wildfire Threat	Identify critical infrastructure threatened by wildfire. Implement and carry out a “living with fire” public education program. Coordinate with outside agencies and form mutual aid agreements. Do fuel reduction work in fire prone areas.	High	2005	Local, State	\$15,500	
Earthquake and Landslide	Goal 1 & 2	All Jurisdictions	Make better informed decisions.	Obtain better earthquake information for local level decision makers. This work has been done for the Newton, Wellsville, Logan and Smithfield 7.5 USGS quads. Complete similar work for the Clarkston, Richmond, Trenton and Paradise 7.5 minute quads. .	Medium	2008	Utah Geologic Survey, Local	\$45,000	Utah Geologic Survey, BRAG
Earthquake and Landslide	Goal 1	All Jurisdictions	Avoid placing new development at risk from geologic hazards.	Develop land use ordinances that require site specific geo-hazard studies be performed prior to development permitting in areas determined to be high risk related to earthquakes (especially for critical or high-occupancy buildings).	High	2006		Minimal	Utah Geologic Survey, BRAG, Utah League of Cities and Towns.
Dam Failure	Goal 1 & 2	Logan City	Reduce the threat of dam failure to those downstream of Logan Canyon	Identify and delineate areas of inundation in the event of dam failure. Develop an action plan for dam failure	Medium	2005	Logan City	Unknown	Utah Div. of Dam Safety
Earthquake	Goal 1 & 2	Logan City	Improve capacity to deal with an earthquake	Build a 1 million gallon culinary water reservoir and another pump station to supply Cliffside area with water. Build a pump station to serve the Castle Hills area of Logan.	High	2004	Logan City	\$3,450,000	
Earthquake	Goal 1 & 2	Logan City	Improve capacity to deal with an earthquake	Protection of Dewitt Spring water supply. Install remote controlled shutoff valves. Replace source line with ductile pipe.	Medium	2004	Logan City	\$5,028,000	
Earthquake	Goal 1 & 2	Logan City	Improve capacity to deal with an earthquake	Increase public readiness through a public education program.	High	2005	Logan City, FEMA	\$50,000	
Earthquake	Goal 1 & 2	Logan City	Improve capacity to deal with an earthquake	Replace water line from 700 N 800 E to 400 N. 700 E with 18” Ductile pipe to prevent rupture in the event of an earthquake.	High	2004	Logan City	\$607,000	
Landslide	Goal 1	Logan City	Protect property from landslides and debris flows	Develop and carry out a maintenance program to service existing retention walls and control structures. Identify areas where potential slides are likely to occur.	Medium	2005	Logan City, FEMA	Unknown	
Severe Weather	Goal 1 & 2	Logan City	Protect residences from severe weather	Encourage avalanche preparedness for backcountry users. Access EOC to ensure they are protected from lightning. Educate public on water conservation for community drought resistance. Develop a secondary water system plan for drought.	Medium	2005	Logan City, FEMA, State	Unknown	
Human Caused Hazards	Goal 1 & 2	Logan City	Protect critical infrastructure from unauthorized human tampering	Protect water sources and above ground system infrastructure with fencing and mason barriers. Replace hatches with diamond plate aluminum. Change critical security locks to a different standard key	High	2005	Local, FEMA	\$212,900	
Critical Infrastructure	Goal 1 & 2	Logan City	Improve Logan Airport Emergency Response Capability	Develop dry chemical capability to meet FAA requirements. Develop foam capability. Obtain Aircraft Fire Rescue personal protective equipment. Provide training to Logan personnel on Airport Crash Rescue. Work to build fire station at Airport. Provide adequate water flow at airport	High	2005	Local, FEMA, FAA	\$3-\$5 Million plus	